



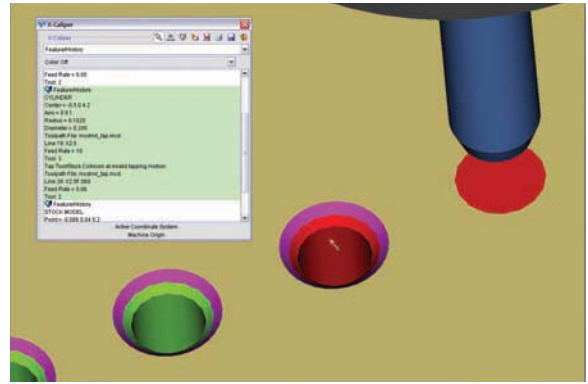
Gühring

## Reducing tapping stress with simulation software

**WITH ITS HIGHER FEED RATES** and greater consequences for failure than other metalcutting operations, tapping can be a high-stress operation. One way to reduce that stress is by using software to simulate the process to identify and correct problems before they start. For example, Vericut 6.2 from CGTech, Irvine, Calif., has a new feature that simulates and analyzes tapping operations.

Tapped holes are visually differentiated from other drilled, bored and reamed holes. Vericut checks that the correct feed rate and tapping direction are used, and also detects if the hole to be tapped is too small.

A feature called X-Caliper allows operators to measure thickness, volume, depth, gaps, distances, angles, hole diameters, corner radii and scallop heights. Vericut can directly measure the depth of blind-holes, countersunk holes and the top and bottom radii of a cone. Additionally, picking a hole on a model file will display the center point. X-Caliper can also measure the distance between the tool and the stock, and show the thread features of a tapped hole, such as pitch threads per inch.



CGTech

An invalid tapping motion being identified in Vericut.

—Alan Rooks, Editorial Director

standard metalcutting advice, which is to always use a maximum number of flutes. However, for tapping this advice would probably be wrong.

“More flutes means there is less space for chips as they are cut,” said David Miskinis, senior application specialist, hole-making for Kennametal Inc., Latrobe, Pa. “More flutes on the same circumference means smaller flutes, both in width and depth. With smaller space comes the

# FINISH FIRST!

## BURR MONSTER

- Premium Sub-Micron Carbide
- Single, Double & Aluma Cuts
- Mold, Tool & Die Making
- Huge Stocking Inventory
- Resharpener Available
- Proudly Made in the USA

### MONSTER TOOL CO

PHONE: 888-CARBIDE (227-2433)  
[www.monstertool.com](http://www.monstertool.com)